

c. Amendments to Claims

1 – 7. (Cancelled)

5 8. (Currently amended) A process for making a structure, comprising:
providing a solid body ~~of~~ comprising MgB_2 ;
ejecting MgB_2 from the body by directing laser light onto the body; and
growing an MgB_2 layer on a surface of a substrate with ~~from~~ a portion of the
ejected MgB_2 .

10 9. (Original) The process of claim 8, wherein the substrate and MgB_2
have lattice constants along the surface that match to at least 10 percent.

15 10. (Original) The process of claim 8, further comprising forming the solid body
by sintering MgB_2 .

11. (Original) The process of claim 8, wherein the ejecting includes directing
light from a pulsed laser onto the body.

20 12. (Currently Amended) The process of claim 8, wherein the substrate
comprises one of SiC , LaAlO_3 , ~~SiO_2~~ , SrTiO_3 , and sapphire.

25 13. (Original) The process of claim 8, wherein the ejecting and growing are
performed in a vacuum chamber that is maintained at a pressure of less than about 10^{-2}
Torr.

14. (Currently amended) The process of claim ~~14~~ 8, wherein the ejecting and
growing are performed in a vacuum chamber that is maintained at a pressure of greater
than about 10^{-6} Torr.

30 15. (Original) The process of claim 13, wherein the growing produces a
crystalline or polycrystalline layer of MgB_2 whose thickness is at least 10 nm.

16. (New) The process of claim 8, wherein the solid body is a solid body of MgB_2 .

17. (New) The process of claim 8, wherein the MgB_2 layer is grown from a
5 portion of the ejected MgB_2 .

18. (New) The process of claim 17, wherein the solid body is a solid body of MgB_2 .

10